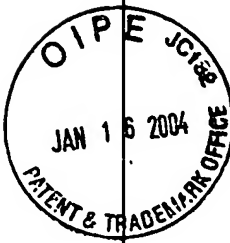


01-20-04



TRANSMITTAL FORM

In re the Application of
Eastlund, Bernard J., et al.

Application No.: 10/058,666

Filing Date: January 28, 2002

Group Art Unit: Unknown

Examiner: Unknown

Attorney Docket No.: 0083299

Total Number of Pages Submitted (Including Transmittal Form): N/A

Handwritten notes and signatures on the right margin, including a large '2' and '1/3/02'.

For: HIGH INTENSITY DISCHARGE LAMP WITH SINGLE CRYSTAL SAPPHIRE ENVELOPE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Transmitted herewith please find the following enclosures:

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached		
<input type="checkbox"/> Amendment / Response	<input type="checkbox"/> Request for Approval of Drawing Corrections	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Preliminary	<input type="checkbox"/> Drawing Figure(s) ; Sheets	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Propriety Information
<input type="checkbox"/> Affidavits / Declaration(s)	<input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input checked="" type="checkbox"/> Additional Enclosure(s) as Listed Below:
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address	- Copy of References Cited in IDS
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Terminal Disclaimer	- Disclosure of Prior Art document (executed by Maurice Levis)
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> Small Entity Statement	- Declaration document (executed by Dr. Leonard Reed)
<input type="checkbox"/> Response to Missing Parts / Incomplete Application	<input type="checkbox"/> Request for Refund	- Return Receipt Postcard
<input type="checkbox"/> Response to Missing Parts Under 37 CFR 1.52 or 1.53		

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AUTHORIZATION
Please grant any extension
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Respectfully submitted,

Peter A. Shaddock II
Registration No. 44,331

EXPRESS MAIL CERTIFICATE		
I hereby certify that this correspondence (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. §1.10, on the date indicated below and is addresses to: Commissioner for Patents P.O. Box 1450, Alexandria, VA 22313-1450		
"Express Mail" Label Number	EU 971498345 US	
Typed or printed name of person signing Certificate	Kelly A. Brown	
Signature		Date: January 16, 2004



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Application No.: 10/058,666

Eastlund, Bernard J., et al.

Group Art Unit: Unknown

Filed: January 28, 2002

Docket No.: 0069333

For: HIGH INTENSITY DISCHARGE LAMP WITH SINGLE CRYSTAL SAPPHIRE ENVELOPE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the attached Disclosure of Prior Art document (executed by Maurice Levis), Declaration document (executed by Dr. Leonard Reed), and other reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

To the best of my knowledge, this Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits in the present application. No certification or fee is required.

Respectfully submitted,

Peter A. Shaddock II
Registration No. 44,331

Kaufman & Canoles
150 West Main Street
P.O. Box 3037
Norfolk, Virginia 23514
Telephone: (757) 624-3342

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"Express Mail" Label Number	EU 971498345 US	
Typed or printed name of person signing Certificate	Kelly A. Brown	
Signature		Date: January 16, 2004



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No: 20020070668

Filed: 06/13/2002

Examiner: Unknown

Inventors: Eastland, Bernard J. and Levis, Maurice E.

Date: Jan 5, 2004

Disclosure of Prior Art

In accordance with my duty to disclose prior art under 37 CFR 1.56, material to patent - ability, I submit a patent and a set of prior art "ILC" documents. I am a named co-inventor of the above-named patent application. These "ILC" documents recently came to my attention. "ILC" refers to a succession of companies over a period of years as explained in the attached Declaration. They are ILC Laboratories, Inc., ILC Inc. and further ILC Technologies, Inc which eventually was merged into Perkin Elmer, Inc.

The documents from "ILC" are printed publications. According to the attached Declaration of Len Reed, three of them (2 through 4) were widely circulated, on a non-confidential basis, to prospective buyers prior to 1975. Number 1 was published circa 1993. These documents are: 1. Data Sheet "High Performance Infrared Sources for Military Applications" - See Fig. 1B "SA75X Sapphire Envelope Xenon Short Arc Lamp" (2 pages). 2. News Release dated "3/4/70" entitled "TX Series Sapphire Tubular Envelope Lamps" (2 pages). 3. Data Sheet: TX Series Sapphire Tubular Envelope Lamps" (3 pages). 4. Engineering Note on a different lamp "Characteristics of the SA-150X-2T1 Sapphire Tubular Lamp Point Source". These documents show lamp bulbs having a single crystal (SC) sapphire body (called "Synthetic Sapphire" which is "already a fully crystallized material" and "single crystal"... - Engineering Note therein); which are cylindrical and tubular and have an outer diameter of 4.8mm or more. ("E" is .250 in. = 6.3 mm). They emitted radiation at 400nm-700nm - visible spectrum - (called uses for "movie projection"). Since the tubes are SC sapphire they have the characteristics of that material, namely tubular burst pressure of at least 155,000 psi at 25 degrees C. and 4500 psi at 1400 degrees C. and max tensile strength of 56,000 psi at 1400 degrees C. The lamps were not for flash operation (called "Type of Current - DC") and had a color temperature of between 4000 - 9000 degrees Kelvin, and the electrodes are separated less than 2mm (gap "G" is .018 inch for 75 watt bulb - .45mm). They were HID (High Intensity Discharge) lamp bulbs and had end plugs.

The U.S. Patent 5,497,049 entitled "High Pressure mercury discharge lamp" was issued March 5, 1996. It shows a lamp of the type of the conventional Phillips UHP (Ultra High Pressure) lamp, millions of which have been sold since their introduction before 1995. It is a quartz lamp, but its fill is at a pressure of over 120 atmospheres, namely "at least about 200 bar" (at least 200 atmospheres - Ex 3 at 0.217 Hg mg/mm is 217 atmospheres at 25 degrees C). The difference that I now see between the Phillips UHP bulb and the bulb of this application is the replacement of a SC sapphire body for

the quartz body of the Phillips lamp. That replacement of SC sapphire for quartz was the same as in the ILC prior art publications.

I hereby declare that all statements herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

A copy of form SB/08 (PTO-1449), the Len Reed Declaration, the "ILC" printed publication documents and the fee of \$180.00 is enclosed.

Respectfully submitted, ,

Maurice E. Levis

Maurice Levis

638 Burton Point Road

Hallieford, VA 23068

c.c. Fay, Kaplan & Marcin, attorneys for the assignee Gem Lighting LLC, 150 Broadway #702, New York, NY 10003

Note: Same for 20030034736 A1 filed 02/20/2003 and for the latest application (filing number and date unknown). Send to: Commissioner for Patents, P.O.Box 1450, Alexandria, VA 22313-1450.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No: 20020070668

Examiner: Unknown

Filed: 06/13/2002

Inventors: Eastland, Bernard J. and Levis, Maurice

Date: Dec 6, 2003

DECLARATION

Enclosed find three documents from "ILC" (ILC Laboratories, Inc.). These publications were circulated, on a non-confidential basis, to prospective buyers prior to 1975. The documents are: 1. News Release dated "3/4/70" entitled "TX Series Sapphire Tubular Envelope Lamps" (2 pages). 2. Data Sheet: "TX Series Sapphire Tubular Envelope Lamps" (3 pages). 3. Engineering Note "Characteristics of the SA-150X-2T1 Sapphire Tubular Lamp Point Source".


At the time these documents were written and distributed, in 1970 I was an employee of ILC Laboratories, Inc., and thereafter prior to 1975, I was an employee of ILC, Inc. Further, I was Director of ILC Laboratories, Inc. and was concerned with the sapphire tubular envelope high pressure short arc lamps described in the above-identified documents. The address of ILC, Inc. at 164 Commercial Street, Sunnyvale, California 94086, was no longer its address after 1975.

In addition, please find enclosed, the data sheet, (2 pages), "High Performance Infrared Sources for Military Applications," which was printed by ILC Technologies, Inc. about 1993, which shows examples of many styles of sapphire envelope arc lamps made prior to 1980; and, especially in Fig. 1B, shows the TX series Xenon short arc lamp style referred to above in paragraph one, which was developed in 1970.

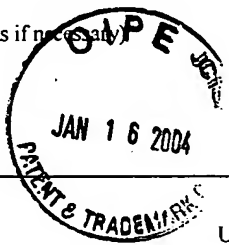
Note: ILC Laboratories, Inc. merged into ILC, Inc. in 1972, which entity subsequently became ILC Technologies, Inc., and yet later, a unit of Perkin Elmer, Inc. I left the employment of ILC Technologies, Inc. in 1980.

I hereby declare that all statements herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,



Dr. Leonard Reed
LR Associates International
P.O. Box 620683
Woodside, CA 94062

Form PTO-1449 (REV. 8-83)	US Dept. of Commerce PATENT & TRADEMARK OFFICE	ATTY DOCKET NO. 0069333	APPLICATION NO. 10/058,666
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		APPLICANT(S) Eastlund, Bernard J., et al.	
<div style="text-align: center;">  </div>		FILING DATE January 28, 2002	GROUP
U.S. PATENT DOCUMENTS			
		5,497,049	03/05/1996 Fischer
FOREIGN PATENT DOCUMENTS			
		DOCUMENT NUMBER	DATE COUNTRY CLASS SUB CLASS
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)			
		<u>Data Sheet</u> ; High Performance Infrared Sources for Military Application; (2 pages); Fig. 1B, SA75X Sapphire Envelope Xenon Short Arc Lamp.	
		<u>News Release</u> ; 3/4/70 – TX Series Sapphire Tubular Envelope Lamps (2 pages); 75 thru 300 Watts.	
		<u>Data Sheet</u> ; TX Series Sapphire Tubular Envelope Lamps (3 pages); with figure.	
		<u>Price Lists</u> ; Sapphire Envelope Xenon D.C. Short Arc Lamps (2 pages).	
		<u>Engineering Note</u> ; Characteristics of the SA-150X-2T1 Sapphire Tubular Lamp Point Source (2 pages); Drawing No. 30180, Design Detail.	
		<u>Pictures</u> ; Sapphire Envelope Lamps (4 pages); a) 150 Watt and 300 Watt Lamp; b) 300 Watt and Sub-Assemblies (2 pages); c) 1000 Watt Lamp.	
EXAMINER		DATE CONSIDERED	
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			